



MODEL NUMBER:

SS2618-40

**MILLIMETER SOLID STATE RF AMPLIFIER,
18 GHZ – 26.5 GHZ, 40 WATTS**

FEATURES:

- Rack mounted system
- Class AB linear GaAsFET design
- Instantaneous wide bandwidth
- Suitable for all single channel modulation standards
- Local LCD & remote flexible interfaces
- Designed for EMI/RFI, lab, and general communication applications
- High reliability and ruggedness

TEST EQUIPMENT DESCRIPTION

The EMC Shops **SS2618-40** is the first solid state millimeter RF amplifier geared toward the compliance test requirements setout in MIL-STD 461 and DO-160 compliance standards. With remote and touch screen interfacing, users have the flexibility to setup tests for short term or automate permanent installs. Monitor Forward an Reverse power, as well as VSWR, GAIN, ALC, V/I and Temperature.

The **SS2618-40** features 2.9mm (K- female) or WR42 waveguide RF output connectors, optionally installed on the front or rear). A built in pump allows for an advanced air/liquid system to ensure consistent temperature while running long test cycles. The beauty of it all, is the solid state modules are replaced at fractions of the price of a traveling wave tube (TWT) amplifier ensuring minimal service costs throughout the life of the amplifier.

ELECTRICAL SPECIFICATIONS

| PARAMETER | SPECIFICATION | NOTES |
|------------------------------|----------------|------------------------------------|
| Operating Frequency Range | 18 - 26.5 GHz | |
| Power Output CW | 40 Watt Min | |
| Power Gain | 46 dB Min | |
| Power Gain Flatness | 4.0 dB p-p Max | Constant input power |
| Input Return Loss | 10 dB Min | Relative to 50 Ohm |
| 2-Tone Intermodulation (IMD) | -30 dBc Typ | 34dBm/Tone, $\Delta = 1\text{MHz}$ |
| Harmonics | -20 dBc Min | At rated Pout |
| Spurious | 60 dBc Min | Non-harmonics |
| Operating Voltage | 100 - 240 VAC | |
| Power Consumption | 800 Watt Max | |
| Input Power Protection | +3 dBm Max | <10 Sec without damage |
| Load VSWR Protection | 5 : 1 | <1 minute at rated Pout |

ENVIRONMENTAL CHARACTERISTICS

| PARAMETER | SPECIFICATION | NOTES |
|-------------------------------|---------------|------------------|
| Operating Ambient Temperature | 0 to +50 °C | |
| Storage Temperature | -40 to +85 °C | |
| Relative Humidity | 5 to 95 % | Non-condensation |

MECHANICAL SPECIFICATIONS

| PARAMETER | SPECIFICATION | NOTES |
|--|---|------------------------------|
| Dimensions W x H x D | 5U Rack Mounted Chassis | 5U |
| Weight | 35 kg. | |
| RF Connectors In/Out | 2.9 mm (K / air type) Female | |
| AC Power / Interface Connector | IEC 60320-C14 / 9-Pin D-Sub | Or equivalent |
| Cooling | Built in Fan Cooling | Variable speed |
| EMI SERIES: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP | Ethernet RJ-45 TCP/IP, RS422/485 Optional GPIB Interface | Remote Bluetooth application |

OUTLINE DRAWING

